Bar Chart for Improvement to Roads and Drains and Other Developmental Works At 407,707,208 Sfs, Major Akshay Girish Kumar Road Yelahanka 4th And 5th Phase And Surrounding Areas In Ward No.01,03 And 04 Of Yelahanka Division Under Amruthnagarothana Grants (Package-04)

THIRD AND FINAL BILL

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead	100					
2	Removing and resetting of footpath slab (Approved Rate)	100					
3	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and lead (V-3,P.No.10, I.No.2.21 of PWD S.R 2021-22)	0					
4	Removing and resetting of kerb stones(Approved Rate)	100					
5	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for	100					

Sl.No	Description of work	Complet	Progress Chart
			20% 40% 60% 80% 100%
6	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate	100	
7	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded	100	
8	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. (V-III,P.No.99, I.No.13.1.2of	100	
9	Providing and fixing precast reinforced cement concrete covering slabs of 10cm thick made of M20 with OPC cement,with 20mm and down size graded granite metal coarse aggregate @0.70 mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges	100	
10	Providing and fixing RCC precast cover slab of 230mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both	0	
	Qty up to 125%	100	
	Qty above 125%	100	

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
11	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc. complete as directed by the Engineer in	100					
12	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces (V-III No-8.10,P No-56 of PWD BCSR 2021-22)	100					
13	Construction of Median and Island above road level with approved material deposited at site from roadway cutting and excavation for drain and foundation of other structures, spread, graded and compacted as per clause 408 (V-3,P.No.25, I.No.4.29 of PW, P&IWTD S.R 2021-22)	100					
14	Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour	100					
15	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
16	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with	99					
17	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the	100					
18	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2						
	Qty up to 125%	100					
	Qty above 125%	100					
19	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous	100					
20	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting						
	Qty up to 125%	100					
	Qty above 125%	100					
21	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be						

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
	Qty up to 125%	100					
	Qty above 125%	100					
22	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm	96					
23	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer	97					
24	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (V-III Page No.3, Item No.1.4 A of PWD SR 2021-22)	100					
25	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material to the appropriate disposal area as per direction of Engineer-in-charge Asbestos cement sheet (P.No.165, V-II, I.No.19.27.2 of PWD SR 2021-22)	100					
26	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer-in-charge In cement mortar(V-II, I.No.19.7.3	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
27	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer in-charge. In cement mortar (P.No.163, V-II	100					
28	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces	100					
29	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces	100					
30	Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall	100					
31	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm	100					
32	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well	100					
33	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)						

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
	Qty up to 125%	100					
	Qty above 125%	100					
34	Providing Flush/ Ruled pointing: Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) after raking joints to depth nicely lining, including cost of materials, labour, curing as per specifications and as per directions of						
	Qty up to 125%	100					
	Qty above 125%	100					
35	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and	100					
36	Supplying and filling in plinth with sand under floors, foundation of Bridges including watering, ramming, consolidating and dressing complete.	100					
37	Removal of Unserviceable Soil with Disposal upto a suitable distance as directed by the Engineer incharge of work	100					
38	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
39	Providing and laying in position Reinforced cement concrete for all Super structures of building, Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse	100					
40	Terrace Column						
	Qty up to 125%	100					
	Qty above 125%	100					
41	Ground Floor oof Beams						
	Qty up to 125%	100					
	Qty above 125%	100					
42	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super						
43	Terrace						
	Qty up to 125%	100					
	Qty above 125%	100					
44	Providing Thermo-Mechanically Treated bars of grade Fe-500 or more Steel reinforcement for R.C.C. work including straightening,cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as	100					
45	Terrace	0					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
46	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and						
	Qty up to 125%	100					
	Qty above 125%	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
47	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and	0					
48	Terrace	100					
49	Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonary including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per	100					
50	Terrace	0					
	Qty up to 125%	100					
	Qty above 125%	100					
51	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement to brick/stone masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials,	100					
52	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:3 (1 cement: 3 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
53	Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonary including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. Extra for Plastering on circular work not exceeding 6m in radius. In one coat including cost of material, labour, scaffolding etc as per specifications and as per directions of the Engineer-in-charge. **External Circular Column Plastering**	0					
54	Finishing walls with water proofing cement paint of required shade :New work (Two coats applied @ 4.84 kg/10 m²) to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-incharge. **External wall painting Ground Floor**	100					
55	**Terrace**						
	Qty up to 125%	100					
	Qty above 125%	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
56	Finishing walls with textured exterior paint of required shade: New work (Two coats applied @ 3.28 kg/10 m²) over and including priming coat of exterior primer applied @ 2.20 kg/10m2 to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-incharge. **External wall painting Ground Floor**	100					
57	**Terrace**						
	Qty up to 125%	100					
	Qty above 125%	100					
58	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer incharge. (**Internal + Ceiling Painting**)	100					
59	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
60	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joints with white cement and matching pigments etc., complete **Size of Tile 600x600 mm**	0					
61	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/m2 including pointing	0					
62	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding.						
	Qty up to 125%	100					
	Qty above 125%	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
63	Providing & fixing of 2-track x 2-panel sliding windows made out of multi chambered UPVC (Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having an overall size of 50mm width x 42mmheight with reinforcement of 1mm thickness and Sash with overall size of 31mm X 57mm with Gi reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 21.5mm x 9.5 mm. Windows shall be provided with 5mm plain float glass, standard hardware& single point locking system with touch lock. Wall thickness of frame & sash shall be of 1.8+-0.2 mm. Maximum possible size - 1519mm x 1519mm. (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made)	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
64	Providing & fixing of louvered ventilator made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the ventilator frame. The frame having overall size of 39mm x 39mm with GI reinforcement of 1mm thickness. Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size – 1000mm x 1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made)fixtures and separate charges for minor T&P's shall not be made)	0					
65	Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications.	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
66	Providing and fixing in position fully panelled Mathi/Nandi wood shutters for doors with stiles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures)	100					
67	Fixing of door frame in an existing opening including embedding frame in floor and walls after cutting masonry for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and down size granite metal painting two coats of coal tar to sides of frame, making good the damages to walls and floor as required and disposal of the debris with lead upto 50 m. including cost of materials, labour charges, complete as per specifications.(V-II, I.No 12.51, Page No-105 of PWD SR 2021-22)	100					
68	Providing & fixing factory made PVC Door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet metered cut at corners & jointed 2 No.s of 150mm long brackets of 15x15mm M.S Square tube, the entire door frame to be reinforced with 19x19mm M.S Square tube of 19 gauge. The door frame to be fixed to the wall using M.S. Screws of 65/80mm size complete as per manufacturers specification & direction of Engineer-in-charge.	0					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
69	Providing & fixing 30mm thick factory made rigid foam Panelled Door Shutters made from M.S. tube of 19 gauge thickness, size 19x19mm for stiles and 15x15mm for top & bottom rails, covered with heat moulded PVC C channel of 5mm thick sheet & 30 x 50mm wide to form stiles & 5mm thick & 75mm wide PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm	0					
70	Applying priming coat: With ready mixed pink or Grey primer of approved brand and	100					
71	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer. Using M.S. angels 40x40x6 mm for diagonal braces including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.	0					
	Qty up to 125%	100					
	Qty above 125%	100					
72	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two coat applied @ 0.90 ltr/10 m^2 over an under coat of primer applied @ 0.80 ltr/10 m^2 of approved brand and manufacture including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.						

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
	Qty up to 125%	100					
	Qty above 125%	100					
73	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The water proofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge. **Terrace**	100					
74	Providing & Fixing Fixtures Aluminum tower bolts	100					
75	Hold Fast	100					
76	SS Screws #8x19	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
77	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:White Vitreous China Wash basin size 630x450 mm with a pair of 15mm C.P. brass pillar taps.	0					
78	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	0					
79	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern	0					
80	Providing and fixing brass stop cock of approved quality : 20 mm nominal bore	0					
81	Providing and fixing brass bib cock of [illegible]	0					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
82	Providing and fixing Brass full way valve gate with C.I. wheel of approved quality	0					
83	Providing and fixing Brass full way valve gate with C.I. wheel of approved quality	0					
84	Supplying and wiring adopting loop system in existing pvc conduit/casing caping using 1100v grade,COPPER conducter flexible multistrand FRLS PVCinsulated,2x1.5Sq.mm Cable confirming to the GTP without switch,the other end of the wire shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. (P.No.2 ,Item No 2.1 PWD Electrical SR-2022-23) **2.1.1)Short point upto 3Mtr from tapping point to out let via switch box**	100					
85	2.1.2)Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	100					
86	2.1.3)Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	100					
87	2.1.4)Two outlet in a row,above 3Mtr upto 6Mtr from tapping point to out let via switches	100					
88	2.1.5)Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches box	100					
89	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall. (P.No.5 ,Item No 3.4 PWD Electrical SR-2022-23) **3.4.1) 1-3Way**	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
90	3.4.2)4-5Way	100					
91	3.4.3)6 Way	100					
92	3.4.4)8Way	100					
93	3.4.5) 10-12Way	100					
94	Suppling and fixing PVC/metal conduit deep juction boxes.(P.No.1 ,Item No 1.5 PWD Electrical SR-2022-23) **1.5.1)19/20mm deep juction box**	100					
95	1.5.2) 25mm deep juction box	100					
96	1.5.3) 32mm deep juction box	100					
97	1.12)Suplay and fixing Metal Fan Box with Round Hook (P.No.2, Item No 1.12 PWD Electrical SR-2022-23)	100					
98	Supplying and mounting 2 nos of 2 way 6amps flush type switches either surface /flush mounted on exisinting gang box or in 4mm thick plastic sheet and mounted on a flush mounted wooden box and wiring as required . (P.No.5, Item No 3.2 PWD Electrical SR-2022-23)	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
99	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.. (P.No.5, Item No 3.6 PWD Electrical SR-2022-23) **3.6.1) 6A mps one way**	100					
100	3.6.2) 6A mps Two way	100					
101	3.6.3) 6A mps 3way socket.	100					
102	3.6.3) Stepped fan regulator.	100					
103	3.6.8) 16A mps one way	100					
104	3.6.11) 6/16A aps universal socket.	100					
105	3.6.12) tv/telephone socket	100					
106	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.. (P.No.5, Item No 3.6 PWD Electrical SR-2022-23) **3.6.3) 6A mps 3way socket.**	100					
107	3.6.3) Stepped fan regulator.	100					
108	3.6.8) 16Amps one way switch	100					
109	3.6.11) 6/16Amps univeral socket	100					

Sl.No	Description of work	Complet	Progress Chart				
			20%	40%	60%	80%	100%
110	**Concealed Conduit System:** Supplying …. Mm dia 2mm2.5mm Thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc… and running before concreting th eslab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be convered using PVC end enclosures. run with 18SWG GI fish wire wherever necessary. (P.No.1, Item No 1.2 PWD Electrical SR-2022-23) **1.2.1) 19/20mm dia 2mm thik**	100					
111	1.2.2) 25mm dia 2mm thik	100					
112	1.2.3) 32mm dia 2.5mm thik	100					
113	**Groove cutting:** Supplying …. Mm dia 2mm2.5mm Thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc… by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit	100					
114	1.3.2) 25mm dia 2mm thik	100					
115	1.3.3) 32mm dia 2.5mm thik	100					
116	Wiring for lighting /power circuit using one of PVC insulated 1100v grade,multis and Copper conductor single core cable in open or consealed system of wiring. (P.No.3, Item No 2.3 PWD Electrical SR-2022-23) **2.3.2) 1.5 sqmm**	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
117	2.3.3) 2.5 sqmm	100					
118	2.3.4) 4 sqmm	100					
119	2.3.3) 6 sqmm	100					
120	Supplying and fixing regular MCB distribution boards on wall/ woodboard /flush mounting required clamps,bolts,nuts etc.. with provision for fixing suitable type capacity MCB's single phase /3 phase /single door with powder coated painting etc., complete. (P.No.13, Item No 5.18 PWD Electrical SR-2022-23) 5.18.9) 12Way SP & N	100					
121	5.18.11) 4Way TP & N	100					
122	Supplying and fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up 300mA sensitivity on exsiting wood/panel board.(P.No.13, Item No 5.20 PWD Electrical SR-2022-23) **5.20.2)32-40 Amps 2 Pole**	100					
123	5.20.3)32-40 Amps 4 Pole	100					
124	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and wiring complete as required.(P.No.13, Item No 5.17 PWD Electrical SR-2022-23) **5.17.1)6-32Amps SP**	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
125	5.17.4)6-32Amps DP	100					
126	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. Item No 6.3	100					
127	Supply an fixing of …feet pvc batten with integrated led tube quality diffuser with life of 25000 burninng hours & 70% lumen maintance with CRI>80. power input :220-240V @ 50 hz & power factor >.9 along with CE approved drivers. 2 years warranty. (P.No.34, Item No 11.3 PWD Electrical SR-2022-23) **11.3.1)LED light fitting 1x2' - 9/10w**	100					
128	11.3.2)LED light fitting 1x4' -20/22w	100					
129	11.3.3)LED light fitting 1x4' -36/40w	100					
130	Supplying exhaust fan of 1440 RPM of 300 mm (12") size with bracket blades complete	100					
131	Supplying exhaust fan of 1440 RPM of 300 mm (12") size with bracket blades complete for light duty suitable for operate of 230V 50Hz, AC Supply..(P.No.22, Item No 6.2 PWD Electrical SR-2022-23)	100					
132	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double bail bearing system..(P.No.22, Item No 6.3 PWD Electrical SR-2022-23)	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
133	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Microprocessed release and Earth Fault as per IS-13947. (Icu = Ics)(34/9). .(P.No.12, Item No 5.14 PWD Electrical SR-2022-23)	100					
134	Supplying of multi function digital meter with three line back light LCD type display for voltage,Current,frequency,Power,Powerfactor,KVA,KWH,KVARsuitable for 3 Phase,4 wire LT network with IP 54 degree of	100					
135	Supplying,fixing and wiring earth leakage relay with core balanced current transformer suitable for single phase 50 Hz AC with latest microcontroller based,digital readout of percentage leakage current,programable delay/auto/manual reset facility suitable to mount on DIN rail/flush mounting on panel board. (P.No.14, Item No 5.21 PWD Electrical SR-2022-23)	100					
136	Supplying, fixing and wiring 50/5A to 400/5A 5VA Burden class 1 Current Transformer. (P.No.14, Item No 5.34 PWD Electrical SR-2022-23)	100					
137	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and wiring complete as required.(P.No.13, Item No 5.17 PWD Electrical SR-2022-23) **5.17.8)40Amps TPN**	100					

Sl.No	Description of work	Complet	Progress Chart
			20% 40% 60% 80% 100%
138	5.17.9)50-63Amps TPN	100	
139	5.17.5)40Amps DP	100	
140	5.17.4)6-32Amps DP	100	
141	Supplying,fixing and Fixing of Shunt trip suitable for MCCB. CBCT. (P.No.12, Item No 5.15 PWD Electrical SR-2022-23)	100	
142	Supplying .....amps rated 3phase with netural bus bar using required capacity electrolytic alluminium strips covered with heat shrinkable coloured PVC sleeve,mounted on phenolic/ERP/DMC insulator which are mounted on powder coated 40x6 mm M.S.flat frame work in existing panel board.The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts,nuts and washers etc.,complete.(P.No.15, Item No 5.40 PWD Electrical SR-2022-23)	100	

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
143	Fabricating supplying and mounting MS box made out 16 SWG suitable for floor/wall mounting,fully weather proof with provision for better heat dissipation, provided with hinged front cover,equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. (P.No.15, Item No 5.42 PWD Electrical SR-2022-23) **5.42.1)14SWG**	100					
144	5.42.2)16SWG	100					
145	Supplying and fixing of LED type pannel board indicating lamp with reqired colour suitable for 220v A.C.50 Hz 12/24v D.C. (P.No.14, Item No 5.38 PWD Electrical SR-2022-23)	100					
Eirl-1	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. * Polished Granite stone slab Black, Cherry Red, Brown, Cat Eye, River Pink or equivalent.	100					

Sl.No	Description of work	Complet	Progress Chart 20%	40%	60%	80%	100%
Eirl-2	Providing and fixing Structural Steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. (P.No.75 ,Item No 11.2 PWDSR-2022-23)	100					
Eirl-3	Providing & fixing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete as per design drawings (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required as per the direction of Engineer in charge. 0.63 mm thick with zinc coating not less than 275 g/ m^2	100					

Asst. Executive Engineer
Yelahanka Sub. Divisor
(BBMP Ynk. Zn)

Consultants Representative

SRI SAI CONSULTANTS